Amendments in the specification

1) Please replace the paragraph beginning on line 4 of page 8 with the following paragraph:

Figs. 4A&B are cross sectional views of fiber amplifiers suitable for use in a light source of the invention.

2) Please replace the paragraph beginning on line 25 of page 10 with the following paragraph:

Fiber amplifier **14** produces a pulsed intermediate beam **52** at primary wavelength λ_p from primary beam **34**. Preferably, pulsed intermediate beam **52** exhibits high peak power, e.g., in the range of 10,000 Watts in each pulse **54** (only one pulse shown for reasons of clarity). To achieve such high peak power fiber amplifier **14** has a short length D, e.g., D is on the order of 2 meters, so as to suppress stimulated Raman scattering (SRS). In addition, to achieve efficient absorption of pump light **40** in core **50** over such short length D, cladding **46** is preferably small, e.g., between 100 μm and 200 μm in diameter. Furthermore, core **50** is preferably large, e.g., between 5 μm and 10 μm diameter, and exhibits a high doping level, e.g., 0.5% or more. A person skilled in the art will be able to select the appropriate dopant for doping core **50** to amplify primary beam **34** based on primary wavelength λ_p. ~~Suitable doping ions when primary wavelength λ_p is in the green range are Ytterbium ions~~

~~while Neodymium ions can be used for amplifying primary beam **34** when its light is in the green or blue range.~~

3) Please replace the paragraph beginning on line 20 of page 11 with the following paragraph:

In the present embodiment, nonlinear element **60** consists of a single nonlinear optical crystal capable of converting primary wavelength λ_p to output wavelength λ_{out} in the UV, green or blue range. The conversion process is second harmonic generation (SHG) and is well-known in the art. SHG doubles the frequency of intermediate beam **52**, or, equivalently, halves primary wavelength λ_p such that $2\lambda_{out}=\lambda_p$. Hence, when primary wavelength λ_p is in the range from 860 nm to 1100 nm output wavelength λ_{out} will be in the range from 430 nm to 550 nm. Suitable doping ions for doping core **50** when output wavelength λ_{out} is in the green range are Ytterbium ions while Neodymium ions can be used for amplifying primary beam **34** when output wavelength λ_{out} is in the green or blue range.

4) Please replace the paragraph beginning on line 30 of page 11 with the following paragraph:

Preferably, the optical crystal used as nonlinear element **60** is a borate crystal. In fact, preferably the optical crystal is an LBO or BBO crystal. Also, although only one crystal is employed as nonlinear element **60** in the present embodiment, several can be used, as will be appreciated by those skilled in the art. In

addition, any appropriate phase matching technique known in the art is employed to ensure efficient SHG in nonlinear element **60**.

5) Please replace the paragraph beginning on line 4 of page 12 with the following paragraph:

During operation, pump source **16** is tuned by mechanism **18** to generate pump light **20** in the form of a cw beam at the requisite wavelength to pump gain medium **30**. Passively Q-switched laser **12** is adjusted such that primary pulses **36** of output beam **34** are controlled. To achieve this, one notes that a round-trip time, t_{rt}, of cavity **26** is related to length L of cavity **26** by the equation:

$$t_{rt} = \frac{2L}{c},$$

where c is the speed of light. Hence, round-trip time t_{rt} can be set by selecting length L of cavity **26**. Meanwhile, passive Q-switch **32**, in this case <u>a</u> saturable absorber Q-switch, is adjusted by setting its inter-pulse time. This is done by choosing the appropriate saturable loss, q_o, of the absorbing material and using the fact that the repetition rate of passive Q-switch **32** is proportional to pump power or the power level of pump light **20**, and that increasing the repetition rate produces longer primary pulses **36**. A person skilled in the art will know how to adjust these parameters to obtain the appropriate inter-pulse time and will also find additional teachings provided by G.J. Spühler et al., "Experimentally Confirmed Design Guidelines for Passively Q-Switched Microchip Lasers Using Semiconductor

Saturable Absorbers", J. Opt. Soc. Am. B, Vol. 16, No. 3, March 1999, pp. 376-388 and other sources.

6) Please replace the paragraph beginning on line 14 of page 20 with the following paragraph:

When operating image display system **200**, projection light source **202** is set to deliver output pulses **232** at the green wavelength from light source one, at the blue wavelength from light source two, and at the red wavelength from light source three. The pulses are repeated at a certain rate (i.e., at the inter-pulse rate set as described above). Specifically, as better illustrated in Fig. ~~7~~ 8, light source **202** is set to deliver a number q of pulses **232** during a refresh time $t_{refr.}$ which is the time allotted by control **214** of linear scanner **210** to generating each line of the image. Preferably, the number of pulses **232** during refresh time $t_{refr.}$ should be an integer multiple of the refresh rate, e.g., 6 or more pulses **232** per refresh time $t_{refr.}$ (i.e., q=6). For better visualization, Fig. 8 illustrates the q pulses **232** delivered by projection light source **202** during each refresh time $t_{refr.}$.